

Computing Hardware Request for College or University Degree [Certification & Affiliations][Version -1]

By

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rh@rshq.qc.ca / demandeurs@omhm.qc.ca / info@omhlaval.ca / info@game.de
info@di-tourismusforschung.de / hsr@gesis.org / s.mueller@fh-westkueste.de
hello@creditcardgenius.ca / spoof@americanexpress.com/fphx018@pharmaprix.ca
wilner.menelas@spvm.qc.ca / psi@nationalarchives.gsi.gov.uk/ info@evergreencertifications.com
corporate@oreilly.com /editor.computing@gmail.com / stats@northwestern.edu
contact@cliniquelouispasteur.com /dguedegbe01@gmail.com / pbonsamaritain@yahoo.fr
support@protonmail.zendesk.com / mcgill.psc@gmail.com/ admin.visess@univie.ac.at
sales@dvelectronics.com / info@hotelrubyfoos.com / global@autocrypt.io
servicedesk@ehealthsask.ca / research@macewan.ca / sales@neuroncomputers.com
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Abstract

They are important Computing Minimum Hardware Specifications to enroll and complete a program in the faculty of arts & science [data science, mathematics, and/or Statistics]. We introduce a short guideline [it is possible to submit a hardware request to some institutions and Journals].

1 Introduction

We can submit a hardware request to some institutions and Journals. The need for such requests is important when enrolling or applying to a program, mainly in the faculty of arts & science [data science, mathematics, and/or Statistics, social sciences, etc.]. Based on HP Enterprise Recommendations, there is **\$5,000-\$50,000 financial investment range** for professional data science workstations: read [here](#).

Read more about the **theory of systems** [[here](#)]:

The Theory of system suggests that each object within a system allows its own Robot Framework that allows flexible automation and Process automation.

This definition above places **Data Science as a Program** [or a Robot] that can be modelled in object-oriented design with multi-agent system theory. The Computers Hardware are part of Data Science Programs, and are treated as a Whole Unit component, with different requirements **interacting** with other objects: The RAM Memory, The HDD/SSD (Hard Disk Drive/Solid State Drive), The Motherboard [CPU/GPU], The Cloud Servers, The Nvidia Graphic Devices, etc. **Without the Hardware Components, Data Analytics can not be automated or processed.**

Our Highlights will include the Puget Systems Hardware Recommendations for Data Science, [here](#), The NorthWestern University Hardware Specification for a Master of Data Science, [here](#)[[here too](#)], The WhiteBox Data Scientist Environment Setup, [here](#), The GeeksForGeeks Data Science System Requirements, [here](#), [HP WorkStation Requirement for Data Science](#), [University of Waterloo Phd Student Computer Policy](#), [Posit Community Hardware Requirements](#), [DataMine Systems Requirements](#), [Minitab Module Requirements](#), [Applied Epi Basic Recommendations](#), [OriginLab](#), [Vertigis Studio](#), [Leica GeoSystem Specifications](#), [Optics Guideline](#), [St Clair College](#), [RRC Polytech Specs for Applicants](#), [BYU Idaho Specs Requirements for Applicants](#), [Centennial College](#), etc.

References are available: [[Abd](#)], [[RMRGRT⁺12](#)], [[OJO⁺22](#)], [[BSB⁺92](#)], [[vdM12](#)], [[Jaw18](#)], [[SCE⁺17](#)], [[GZS18](#)], [[PLZW18](#)], [[RRN⁺18](#)], etc.

We may submit this paper to [Journal of Hardware and Systems Security](#), [Journal of Open Hardware](#), [The Journal of Systems Architecture: Embedded Software Design \(JSA\)](#), [Journal of Information Systems](#), [Microprocessors and Microsystems: Embedded Hardware Design \(MICPRO\)](#), [HardWareX Journal](#), [The International Journal of eScience Computing infrastructures and systems](#), [Journal of Computing](#), [Journal of Computing Data & Exploration](#), [Journal of Computing in Higher Education](#), [Journal of Computing Science and Engineering \(JCSE\)](#), [Latin-American Journal of Computing](#), [Journal of Computing and Informatics Research](#), [IEEE Computer Society](#), etc.

1.1 Some basic Computing fact Sheets

A laptop meeting at least the minimum requirements will allow students to participate fully in a STAT courses including the courses for the Data Science major or minor [read [here](#)]. Table 1 gives an overview of the basic recommendations.

Hardware Component	Minimum	Recommended
Random Access Memory (RAM)	16 GB	32 GB
Data Drive*	50 GB	100 GB SSD
Install Drive	5 GB	10 GB
CPU	2 core	4 core
*We recommend using an SSD for the data drive due to the robust increase in performance, especially when dealing with large data sets.		

Table 1: VertiGis Studio Requirement for Data Analytics, [here](#)

1.2 List of Trusted Providers

We had some experiences with¹ (we may contact them for technology requests):

1. Falcon Systems [<https://falconsystems.ca/>,]
2. Dell Computer Technologies [<https://www.dell.com/en-ca/shop/dell-laptops/>],
3. Samsung Computers [<https://www.samsung.com/ca/galaxy-book/>],
4. Alibaba Computers [<https://www.alibaba.com/computers-desktop-and-laptop-suppliers.html>]

1.3 Some Important Photos Catalogues



Figure 1: Hospice Dossou-Yovo, with a blue Wireless Earphone, near Ensae Dakar

¹[some real photos will be provided in further version of this document][the photos are in our Google Drive Storage for k.augustt.alahassa@gmail.com].



Figure 2: Joel Kazoule, with his Computer Hardware, Ensae Dakar



Figure 3: Anatole Goundan, [here](#), with his Computer Hardware, [IFPRI-Ensaе Dakar](#)



Figure 4: Anatole Goundan, at [IFPRI-Ensae Dakar](#)



Figure 5: Jean-Jacques Birba, at Ensae Dakar, with Souleymane Bognini, Elysee Aristide Houndetoungan, Mballo Aliou Diouf [1]



Figure 6: [Jean-Jacques Birba](#), at Ensae Dakar, with [Souleymane Bognini](#), [Elysee Aristide Houndetoungan](#), [Mballo Aliou Diouf](#) [2]



Figure 7: Entrance Building of Ensae Dakar [1]



Figure 8: Entrance Building of Ensae Dakar [2]



Figure 9: Cedric Deguenonvo, with [Kayodé Romaric Agnonmi] at a Ceremonial in Dakar, with Photo Camera, [Mahugnon Stanislas Cedric Deguenonvo (mdeguenonvo@worldbank.org)]



Figure 10: [Corinne Ehou](#), while visiting Dakar, in 2015



Figure 11: Lucien Sagbo, Near ESMT Dakar, <https://www.esmt.sn/>, [1]



Figure 12: [Lucien Sagbo](https://www.esmt.sn/), Near ESMT Dakar, <https://www.esmt.sn/> [2]



Figure 13: [Namaou Radji](#) with a phone, Father Kedote, [read here](#), is near in the Kitchen [Dakar City, Senegal]



Figure 14: A Phone Device in the Department of Statistics, University of Montreal, This phone is connected to many running systems

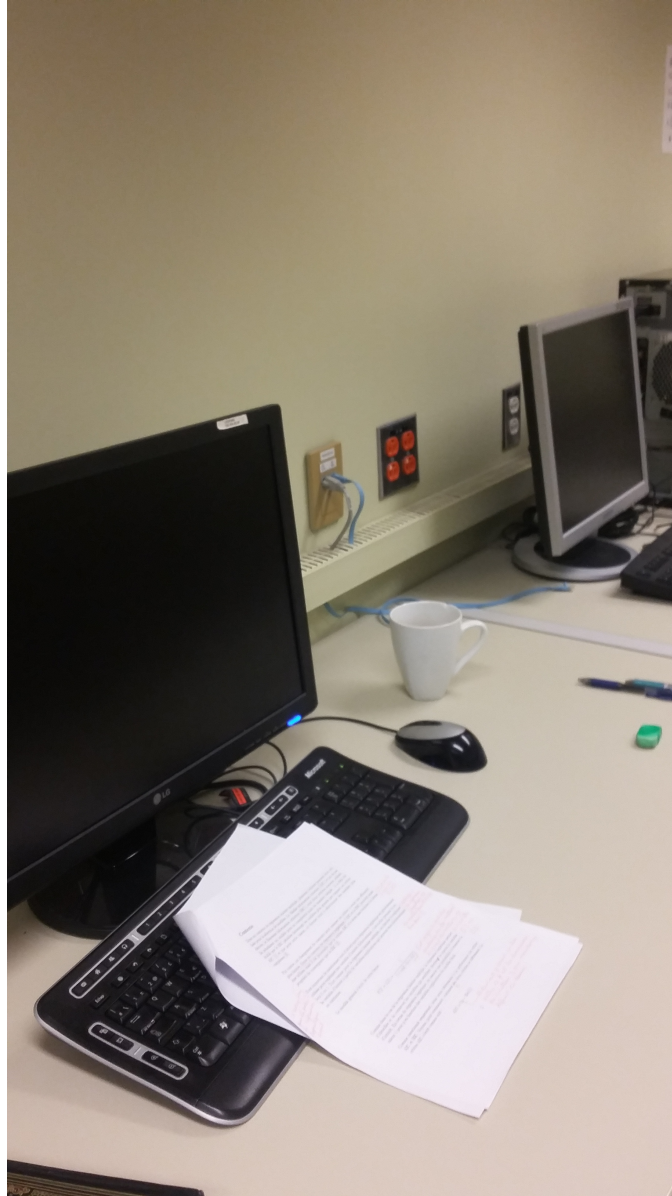


Figure 15: Some Computers in the Department of Statistics, University of Montreal

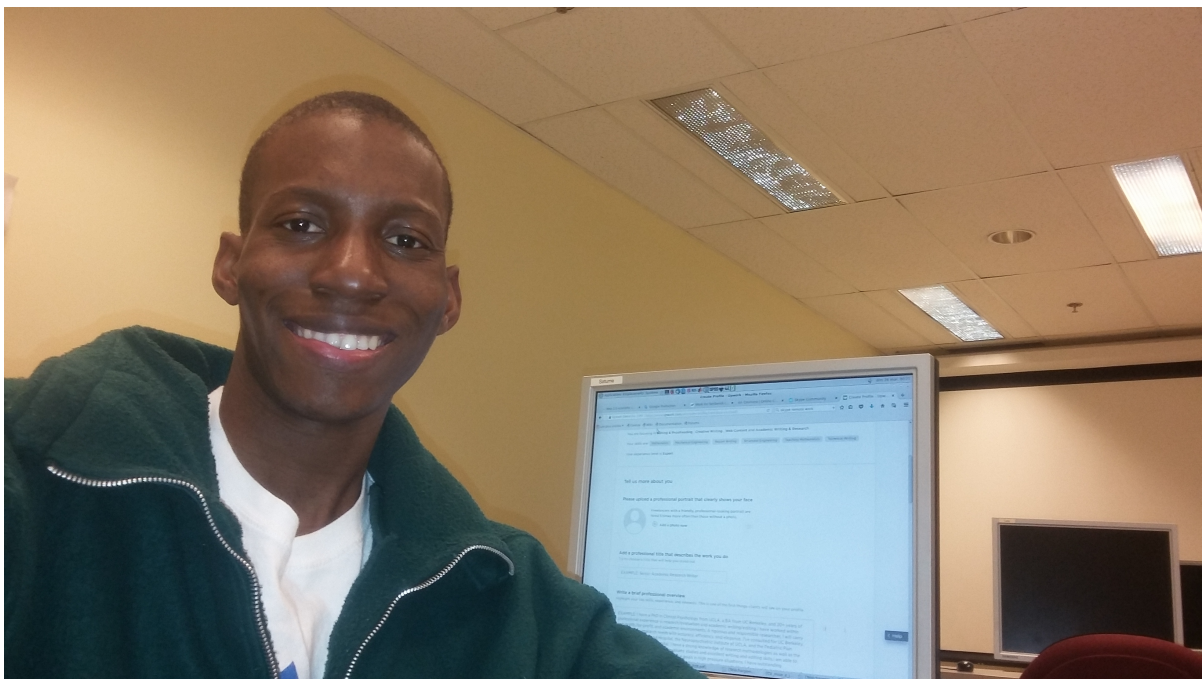


Figure 16: We are in the Department of Statistics, University of Montreal, This is Nonvikan Karl-Augustt Alahassa

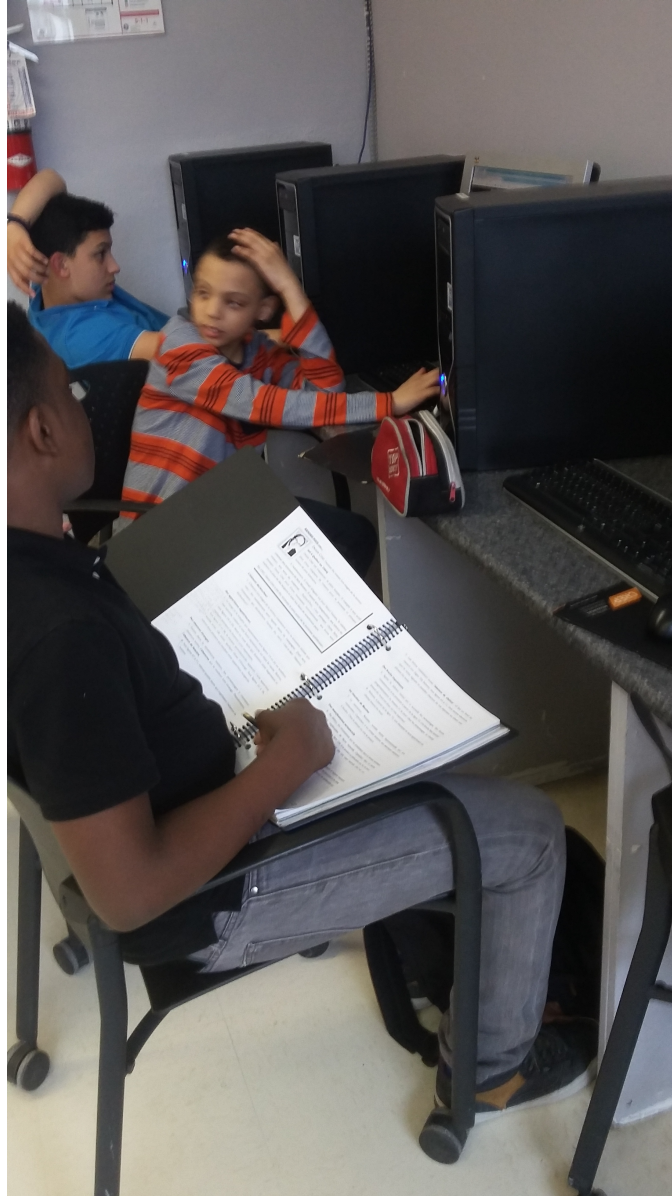


Figure 17: We are in the BCHM, <https://www.bchm.ca/>, of Montreal, Those ones are Students



Figure 18: Montreal Fintech Ecosystem Conference with [Jan Arp](#) [1], Jean Houunkpe, Professor Maciej Augustyniak [maciej.augustyniak@umontreal.ca], Professor Manuel Morales [manuel.morales@umontreal.ca], are in the room, University of Montreal



Figure 19: Montreal Fintech Ecosystem Conference with [Jan Arp](#) [2], Simo Thierry of BMO is on the right, [here](#)

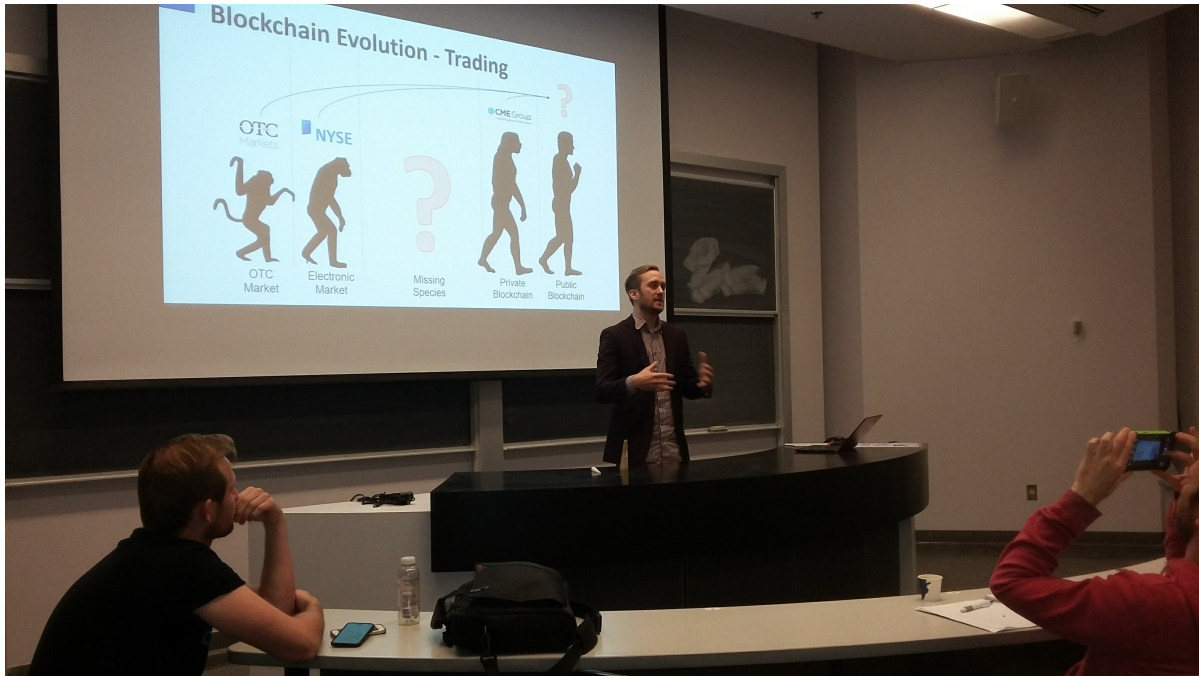


Figure 20: Montreal Fintech Ecosystem Conference with [Jan Arp](#) [3]



Figure 21: Montreal Fintech TirmTeam Investment Club Conference, [Read here](#)



Figure 22: Montreal Fintech TirmTeam Conference, [here](#), with Alexandre. Jean Hounkpe, Professor Maciej Augustyniak [maciej.augustyniak@umontreal.ca], Professor Manuel Morales [manuel.morales@umontreal.ca], are in the room, University of Montreal



Figure 23: Montreal Fintech TirmTeam Conference, [here](#), with Amine El-Kaoutchi, and Vincent Marchal. Jean Hounkpe, Professor Manuel Morales [manuel.morales@umontreal.ca], are in the room, University of Montreal [1]



Figure 24: Montreal Fintech TirmTeam Conference, [here](#), with [Amine El-Kaoutchi](#), and [Vincent Marchal](#). Jean Hounkpe, Professor Manuel Morales [manuel.morales@umontreal.ca], are in the room, University of Montreal [2]



Figure 25: Montreal Amway Conference, in [Hotel Ruby Foos](#) of Montreal [1]



Figure 26: Montreal Amway Conference, in [Hotel Ruby Foos](#) of Montreal[2]



Figure 27: Falcon Computer with Wimo Office Project of Gerry Mapa, [here](#)



Figure 28: VGA Monitor Cable, [here](#), we found it inside the room of [960 of 1077 Saint-Mathieu](#)



Figure 29: Computer Desktop Material, when living in [960 of 1077 Saint-Mathieu](#) : we bought it from Alibaba-Aliexpress and Facebook MarketPlace



Figure 30: Computer Desktop Material, when living in [960 of 1077 Saint-Mathieu](#) : we bought it from Alibaba-Aliexpress and Facebook MarketPlace



Figure 31: Computer Laptop Material, when living in [960 of 1077 Saint-Mathieu](#) : we bought the Dell Laptop in an Electronics Shop near Saint-Michel Station



Figure 32: Dell Optiplex Desktop Material, when living in [960 of 1077 Saint-Mathieu](#) : we bought it from Alibaba-Aliexpress and Facebook MarketPlace



Figure 33: Computer Desktop Material, when living in [960 of 1077 Saint-Mathieu](#) : we bought it from Alibaba-Aliexpress and Facebook MarketPlace



Figure 34: Nonvikan Karl-Augustt Alahassa on some Falcon Computers Desktop Material, when working at [Quantolio Technologies](#)



Figure 35: Nonvikan Karl-Augustt Alahassa, [Urbashi Bhattarcharjee](#), Henock Ploto with a wireless earphone, while living on Van Horne Road, Montreal

1.3.1 Other Equipments of Interest

1. We are looking to buy a **GTRACK, Reporting Management System**: GTRACK facilitates report standardization, incident tracking, and analysis of security and transport operations. It is used by the GuardaWord Team [[here](#)].



Figure 36: Guard Tour Management System, 1, [here](#)

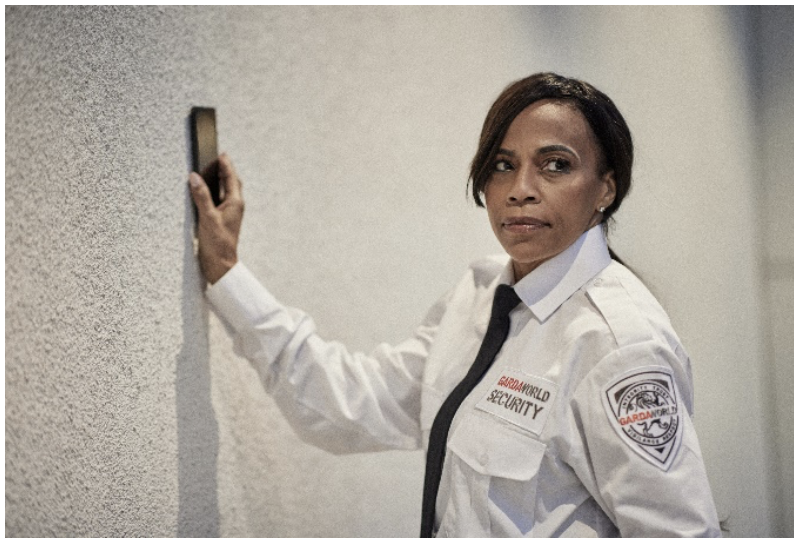


Figure 37: Guard Tour Management System, 2, [here](#)

1.3.2 Acknowledgment - [Thank you so much!]

Today, we are grateful to [ICSA Chinese Statistical Symposium, [here](#)]. The Program Committee includes [devon.lin@queensu.ca.], [joanh@stat.sfu.ca], [qihuang.zhang@mcgill.ca], [hua.shen@ucalgary.ca], [joan_hu@sfu.ca], [whe@stats.uwo.ca], etc. We are in McGill University [[here](#)]. We are grateful for the School of Computer Science, [here](#).

1.4 Thank you for your attention!

We hope you find This introductory useful, and do take a look at our [Preprint on the Universe as a Program](#) for more tutorials and user guides! Please also let us know if you have any feedback using the LinkedIn Link <https://www.linkedin.com/in/nonvikan-karl-augustt-alahassa-42b4a957/>.— more works is available [here](#) . Great Thanks! (We are also writing a book on Statistics: [here](#) or [here](#), Another One of Geometry and Differential Equations, [here](#), all are coming. Please Check other zenodo reports). We will never forget Professor [Gabriel Avossevou](#), [Wilfrid Gangbo](#), Madame Toudonou, Professor of Geography and Land History – Ecole Normale Supérieure of Porto-Novo, College Application, Professor Ahandagbe of Biology – Ecole Normale Supérieure of Porto-Novo, College Application, [Professor Atindogbe Cyriaque – IMSP](#), [Professor Guy Degla](#), [Professeur Jean Chabi Orou](#) (Ecole Normale Supérieure of Natitingou), [Professeur Raphael Kelani](#) (rkelani@gmail.com – Ecole Normale Supérieure of Natitingou, [read here](#)), [Recteur Akpona Simon of Parakou University](#) , [Professor Bouraima of Philosophy](#) – from Ecole Normale Supérieure of Porto-Novo, College Application, Professeur Chabi of Lycée Militaire des Jeunes filles de Natitingou, Rodolphe – kinesiologist (allied with our Parents Koovi & Patricia), etc. We keep some records of some classmates Facebook profiles on this link [here](#) (Jean-Marie Yalinkpon, Gaétan Kinifo, Kpéhoundé Igor, Olivier Tokpanou, Casimir Raymond Teffo, Ephraïm Medegan Flaga, Casimir Takpiti, Bebada Rodrigue, Aurlus Sogbossi, Théophile Agbedjiko, Alain Togbenon, Thibault Houngue, Soliou Gbadamassi, Marius Midomide, Samuel Gbeya, William Ahossi, Akim Yorede, Firmin Zagbo, Henry Abadji, etc.). [Boris Kougnimon](#) – from Ecole Normale Supérieure of Porto-Novo, College Application. The coming list are for some classmates from [ENSAE Dakar]: Souleymane Bognini, Celestin Semevo, Kayode Romaric, Zacharya Souli, Ulrich Faycal Sawadogo, Abdou Haki Maoude, Aliou Mballo Senzala, Jean-Claude Kabore, Joel Kazoule, Khadim Dia, Kokou Abah, Yaya Diallo, Ali Yedan, Hospice Dossou-Yovo, Nixon Koudakpo Kodjo, etc. We do remember some LDS Church relations as Well: Derlin Murray Pierre, [Raymond Lallemand](#), etc. In Ecole Normale Supérieure of Porto-Novo, College Application, we can remember Sinsin Corine Laurant, [here-15](#), [here-16](#), [Roseline Olory](#), [Kiki-Sagbe Aina Mirange](#), [Gbènahin Ninon Raïssa AMOUSSOU](#) [[read here](#)], Rixte Lantonkpode, [Iris NgonKen Caline](#), Christelle Amoussou [Her facebook Profile was Thaila Amoussou, [here](#), or [here](#)], Akpata Abioro Dimitri (lorddisick63@gmail.com), Rhode Ahlonsou (rhode.ahlonsou@gmail.com), Djoffon Morel (djoffon-morel@yahoo.com) [[here-17-3](#)], [read here also](#), Khamil Osseneni, Yessoufou Nourou Dine, Camille Abattan, Hildever Ahlonsou, etc.

Other General Quotes and Citations are [here](#): Lucien Sagbo [ENSAE Dakar, [We have stayed together in a Hospital in Dakar City, Senegal](#)], Alex Spiridigliozzi [Hec Montreal], Carlos Akakpovi [ENSAE Dakar], Kayodé Romaric Agnomi [ENSAE Dakar], Alexandre Judicael [Ecole Normale Supérieure de Natitingou], Alexandre Amoussou-folly [Ecole Normale Supérieure de Natitingou], Zinsou Max Debaly [ENSAE Dakar].

More photos are available [here](#), [here](#), and [here](#), for: Aurlus Sogbossi [Ecole Normale Supérieure de Natitingou], Davo Apollinaire [Ecole Normale Supérieure de Natitingou], Narcisse Houssa-Gansi [Ecole Normale Supérieure de Natitingou], Djabarou Issotina [ENSAE Dakar], Zacharia Souli [ENSAE Dakar], Cheick Diouf [ENSAE Dakar], Armand Coulibaly [ENSAE Dakar], Emmanuel Tago [ENSAE Dakar], Arnaud Lion [Hec Montreal], Lawson-Joel [Colocataire dans la Ville de Porto-Novo], Yves-Codjo [Colocataire dans la Ville de Porto-Novo], Komlan Alain Zogbe [Ecole Normale Supérieure de Natitingou], [Moudachirou Oumarou](#) (he is here in Canada)[ENSAE Dakar], [Akim Korede Oyere](#)[Ecole Normale Supérieure de Natitingou], [Nourou Deen Abdou](#)[Ecole Normale Supérieure de Natitingou], Yaya Diallo (he is here in Canada)[ENSAE Dakar], Fadel Boukari [Ecole Normale Supérieure de Natitingou], Fadel Zime [Ecole Normale Supérieure de Natitingou], Pomanlegni Fiacre, Ferdinand Fatchehoun [Ecole Normale Supérieure de Natitingou, he went to Ecole Normale Supérieure de Porto-Novo too], [Romeo Dah Lokonon](#) [Ecole Normale Supérieure de Porto-Novo], [Gerardo Maroya](#) [Ecole Normale Supérieure de Porto-Novo], [Alexandre Patoum Counde](#)[Ecole Normale Supérieure de Natitingou], [Jack Ligane Sène](#)[ENSAE Dakar], [Khadim Dia](#)[ENSAE Dakar], [Lizette Escobar](#) [LDS Church], [Patrick Agbo](#)[Ecole Normale Supérieure de Natitingou], [Elder Patrick Lauder](#)[LDS Church], [Edrice Gresseau](#) [Restauration Jamacaine - Canada], [Christelle Hounkonnou](#), [Stam Sossou Ahinon](#)[Ecole Normale Supérieure de Natitingou], [Omer Michihoun](#)[Ecole Normale Supérieure de Natitingou], [Beaudelaire Gnavo](#)[Ecole Normale Supérieure de Natitingou], [Jhonet Louis Jean](#)[LDS Church], [Jonathan David](#)[LDS Church], [Ridouanala Massaoudou](#) [Polytechnique Montreal], [Samson Kagmatche](#)[Doctor, Professor & Safety Agent of Zum Residences Montreal], [Johnny Shakamay](#)[LDS Church], [Anders Eklund](#)[LDS Church], [Solenn Benini](#) [Zum Residences, University of Montreal], [Rodin Eboue](#), [Mamady Doumbouya](#) [University of Montreal], [Mahamadou Tankari](#)[ENSAE DAKAR IFPRI], [Arsel Loris Gbossa](#)[Ecole Normale Supérieure de Natitingou], [Enock Mehinto](#)[Ecole Normale Supérieure de Natitingou], [Emmanuel Dabre](#)[University of Montreal], [Felix Houssounou](#)[Ecole Normale Supérieure de Natitingou], [Sayido Medard](#)[Ecole Normale Supérieure de Natitingou], [Modou Faye](#)[ENSAE Dakar], [Fregus Lededji](#)[Ecole Normale Supérieure de Natitingou], [Moussa Diallo](#)[ENSAE Dakar], [Jean-Jacques Birba](#)[ENSAE Dakar], [Soliou Gbadamassi](#)[Ecole Normale Supérieure de Natitingou], [Diabel Diop](#)[ENSAE Dakar], [Ibrahima Gaye](#)[ENSAE Dakar], [Corinne Ehou](#)[Lycée Militaire des Jeunes filles de Natitingou], [Gaetan Bassinga](#)[ENSAE Dakar], [Mohamed Gueye](#)[ENSAE Dakar], [Dudu Cisse](#)[ENSAE Dakar], [Jean Noel](#)

Diouf[ENSAE Dakar], Professor Karim Cisse[ENSAE Dakar], etc. Adelphe Mpo Nda[Ecole Normale Supérieure de Porto-Novo] (We have visited some places together, including some cyber-cafe-internet places), Damien Guedegbe [here][Ecole Normale Supérieure de Natitingou, We have stayed also with him in a Hospital in Natitingou], Akonde [Ecole Normale Supérieure de Porto-Novo], Hedokingbe frejus [Ecole Normale Supérieure de Porto-Novo], Prudence Kotounnou[ENSAE Dakar], Babatounde Yasmine, Babatounde Nadia, Odilon & Farel [Les Jambettes College of Porto-Novo],

Remembering our Primary (High) School, College Les JAMBETTES of Porto-Novo (in Benin, [here-13-1](#), [here-13-2](#), [here-13-3](#)), we can add more classmates names:

- Nazaire, Fadel, Michael Wadagni, Bonheur Sokenou, Esperant Abokou, [Boko Ulrich](#), Mechak [we have met Only in Summer School], Chadrak [we have Only in Summer School], (Mechak & Chadrak are twins from the same mother), Iskine, Canine Olafa (a girl), [Gbènahin Ninon Raïssa AMOUSSOU](#), Ludovik Afanou [a girl], (**Ludovik Afanou and Boko Ulrich came to Senegal, we have met and have visited each other**), Loick Tokpessi (he is currently in Canada, [here](#)), etc. Sometimes, {Ludovik Afanou} was also called kindly {Ludoruth Afanou}.
- The Mother of [Boko Ulrich](#) was once in the past the Director of College Les JAMBETTES of Porto-Novo. We will give more information about the different Directors we have met in those times by the past.
- Other Closed families can be quoted, [here-17-1](#), or [here-17-2](#): Koumagnon, Boko, Radji (we have met with Namaou Radji in Senegal, [here](#)), Corneille Onidogni, Hounto Ronel, Hounto Inès, Bamigboche, [Monsieur Sourou Barthélémy DANSOU de la DESG](#)[Director of Lycee Militaire des Jeunes filles de Natitingou][close to our family][[here](#)]. We sent our Greetings Notes to Silifatou Bouari, [here](#). Of course, we have memories of Agbomenou families, [Romain Agbomenou](#), [Francois Xavier Agbomenou](#), Judith Agbomenou, Firmine Agbomenou, etc.
- **We truly regret the situation of many of our families uncles and grandfathers/grandmothers, have passed, we still do not beleive if this is true or not!**, https://fr.wikipedia.org/wiki/Damien_Zinsou_Alahassa (for example). We need to get in touch with them, Yannick Alahassa, (<https://www.facebook.com/yannfaith>), Arielle Alahassa (<https://www.facebook.com/arielle.alahassa>), Fifame Alahassa (<https://www.facebook.com/bibiane.debamako.9>), Hillary Alahassa (<https://www.facebook.com/hillarydoheto/about>), Cedric Alahassa, etc.
- **Two Important incidents happened when we were kids**: Gwladys Enagnon Alahassa had an incident with someone on the road driving a bycicle [we were playing on a sable of construction, figure 38, we were present during the event], and they drive her in Hospital Louis Pasteur or [Hopital El Fateh] [**We can verify later**]. We were living near Les Jambettes College. Personnaly, I had a hard experience when we were kids when taking a bath, I broke my skull nuke, and father Hounto, our neighbor, drive me in my Mother Hospital. Ouando Clinic Hospital.



Figure 38: Construction Sable

1.5 Contributors & Authorship

We are inspired by the Washington Program of Art & Study, <https://artsci.washington.edu/>, we are currently applying, [read here](#).

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